Did you know?

From 2013, the hepatitis B vaccine will no longer be offered as a school-based immunisation program to Year 7 students. The catch-up hepatitis B vaccine, for Year 7 students or age equivalent 12–13 years who have not yet had a course of hepatitis B vaccine will only be available outside of a school-based program for one year in 2013. Read inside for more information.

The three most common vaccine errors reported to the Immunisation Section are that the wrong vaccine was administered, the vaccine was incorrectly prepared and poor documentation led to an error. Read inside for more detail.

A single free supplementary dose of Prevenar 13® vaccine is available until 30 September 2012 for children aged between 12 and 35 months who have not previously received a dose of Prevenar 13® vaccine.

Clinical features of measles include prodromal fever and one of either a severe cough or conjunctivitis or coryza. These symptoms are present for three to four days prior to onset of a generalised maculopapular rash, typically beginning on the face and spreading to the body. Fever (at least 38°C if measured) must be present at time of rash onset.

Active measures to reduce the risk of a patient recall due to a vaccine cold chain breach include educating appropriate staff, including new staff, to check and record the fridge temperature daily and before using vaccines. Ensure all staff involved in vaccine management from the time it is delivered to the time it is administered, understand the importance of cold chain and how to recognise and report a temperature breach outside 2°C–8°C.

New resources are available on the immunisation website at: www.health.vic.gov.au/immunisation

Recent additions and updates have been added to the National Centre for Immunisation Research and Surveillance (NCIRS) website at: www.ncirs.edu.au

See inside for more detail.
$2,100 incentive to ensure a child is fully immunised

The Australian Government is introducing financial reforms to Australia’s childhood immunisation arrangements that aim to increase the immunisation rates of Australian children over time.

These changes mean that from:

1 July 2012:
- Families will now need to have their children fully immunised to receive the existing $726 per child Family Tax Benefit Part A supplement, replacing the Maternity Immunisation Allowance.
- A new immunisation check will be introduced for one-year-olds to supplement the existing focus on immunisation at two and five years of age. This new check, plus the existing checks at two and five years of age, will provide three payments totalling $2,100.

1 July 2013:
- The meningococcal C, pneumococcal and varicella vaccines will be included in the list of immunisations that are needed for a child to be fully immunised.
- A combination vaccine for measles, mumps, rubella and varicella for children aged 18 months will be added to the National Immunisation Program Schedule.

Stronger incentives

Stronger incentives will help make sure important early vaccinations are received at the recommended times at two, four and six months of age. The new arrangements will create a stronger financial incentive for parents. Over three immunisation check points, families will have a $2,100 incentive to ensure their child is fully immunised. To meet the immunisation requirements children will need to be fully immunised, be on a recognised immunisation catch-up schedule or have an approved exemption.

More vaccines to be assessed

The meningococcal C, pneumococcal and varicella vaccines are currently listed on the National Immunisation Program Schedule. From 1 July 2013 these vaccines will be added to the list of immunisations that children need to receive to be assessed as fully immunised to receive the Family Tax Benefit Part A supplement and Australian Government childcare payments.

What do families need to do?

The Australian Government will write to all families who are affected to explain the changes, and what immunisations their children need. Families then need to make sure their children receive all the listed immunisations in a timely manner. The Family Assistance office will check whether a child is assessed by the Australian Childhood Immunisation Register as being fully immunised (or has an approved exemption) at the end of the financial year when a family’s payments are reconciled and the Family Tax Benefit Part A supplement is provided. This happens after parents lodge their tax returns. Further information about the changes to payments for families can be found at the government website www.fahcsia.gov.au

What exemptions will be available for the new immunisation conditions linked to the Family Tax Benefit Part A supplement?

While the Government considers that immunisation is an important health measure for children and families, existing exemptions will continue to be available. A child may have a temporary or permanent exemption if a recognised immunisation provider determines that receiving the vaccine is medically contraindicated.

A child may also receive an exemption from the immunisation requirements if a recognised immunisation provider indicates that the parent has a conscientious objection to immunising their child. These exemptions will also continue for Child Care Benefit.

Definition of ‘fully immunised’ for the Family Tax Benefit Part A Supplement

<table>
<thead>
<tr>
<th>Age</th>
<th>Diseases immunised against From 1 July 2012</th>
<th>From 1 July 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 months</td>
<td>Diphtheria, tetanus, pertussis, polio, Hib, hepatitis B</td>
<td>Diphtheria, tetanus, pertussis, polio, Hib, hepatitis B, pneumococcal</td>
</tr>
<tr>
<td>4 months</td>
<td>Diphtheria, tetanus, pertussis, polio, Hib, hepatitis B</td>
<td>Diphtheria, tetanus, pertussis, polio, Hib, hepatitis B, pneumococcal</td>
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<tr>
<td>6 months</td>
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<td>Diphtheria, tetanus, pertussis, polio, Hib, hepatitis B, pneumococcal</td>
</tr>
<tr>
<td>12 months</td>
<td>Measles, mumps, rubella, Hib</td>
<td>Measles, mumps, rubella, Hib, meningococcal C</td>
</tr>
<tr>
<td>18 months</td>
<td>Measles, mumps, rubella</td>
<td>Measles, mumps, rubella, varicella</td>
</tr>
<tr>
<td>4 years</td>
<td>Diphtheria, tetanus, pertussis, polio, measles, mumps, rubella</td>
<td>Diphtheria, tetanus, pertussis, polio</td>
</tr>
</tbody>
</table>
Prevenar 13® supplementary vaccine program ends 30 September 2012

A single free supplementary dose of Prevenar 13® vaccine is available for children aged between 12 and 35 months who have not previously received a dose of Prevenar 13® vaccine. This will ensure these children can also benefit from the improved vaccine.

Prevenar 13® has an expanded range of pneumococcal strains to protect children against pneumococcal bacteria. Prevenar 13® protects against 13 strains of pneumococcal disease: 4, 6B, 9V, 14, 18C, 19F, 23F, 1, 5, 7F, 3, 6A, and 19A. The supplementary program will be available until 30 September 2012.

There may be a small increased risk of fever/febrile convulsions with the co-administration of influenza and Prevenar 13® vaccines in children 12 to 35 months of age. The Australian Technical Advisory Group on Immunisation advises that these vaccines may be given together and that providers discuss this risk with parents prior to administering influenza and Prevenar 13® vaccines. If there are strong parental concerns, these vaccines may be administered separately using an interval of at least three days between each vaccine.

Infants who received their Prevenar 13® vaccine at any point in their primary vaccine schedule at ages two, four and six months, do not require the supplementary dose from 12 months of age. The only consideration for a booster dose of Prevenar 13® would be if the child has a high risk medical condition that predisposes them to invasive pneumococcal disease. Access more information about booster doses for high risk children at: http://www.health.vic.gov.au/immunisation/factsheets/schedule-victoria.htm

Translated factsheets
Do you need information in other languages to assist with informed consent for your patients? A range of immunisation information factsheets is available in 28 languages and can be downloaded from the immunisation website at http://www.health.vic.gov.au/immunisation/

Translating and interpreting service
Call 131 450

Translating and Interpreting Service (TIS) National is provided by the Department of Immigration and Citizenship for people who do not speak English and for the English speakers who need to communicate with them.

- TIS National has access to over 1300 contracted interpreters across Australia, speaking more than 120 languages and dialects.
- TIS National is available 24 hours a day, seven days a week for any person or organisation in Australia requiring interpreting services.

Four-year-old vaccines – when should I give them?
The four-year-old vaccine schedule includes Infanrix IPV® and Priorix® vaccines to protect against diphtheria, tetanus, pertussis, poliomyelitis, measles, mumps and rubella. The vaccines are due at the fourth birthday and are considered overdue if they have not been administered by four years and one month of age.

The earliest the four-year-old vaccines can be given is from three years and six months of age. This timeframe can be considered in circumstances such as:

- a newborn infant in the household
- the child is travelling overseas for an extended period
- the immunisation is given opportunistically as the family are not good at presenting for immunisation on time.
Vaccine errors

Common vaccine errors notified to the Department of Health Immunisation Section from January 2010 to May 2012 are displayed in the graph. The top three errors reported were the wrong vaccine administered, incorrect preparation of the vaccine and poor documentation.

1. The wrong vaccine was administered

Frequently the wrong vaccine is administered when vaccine brands have a similar name and/or the same antigens are listed on the packaging. Examples of these brands are Infanrix hexa® and Infanrix IPV®, and ADT Booster® and Boostrix®. Those brands all contain the antigens diphtheria and tetanus and may also contain pertussis and poliomyelitis. Other examples of the same or similar antigens are hepatitis A and hepatitis B, and Prevenar 13® and Pneumovax 23® which are pneumococcal antigen vaccines.

The error also occurs when vaccine brand names are similar sounding or the labelling is similar such as Hiberix® and HBVax11® or Infanrix hexa® and Infanrix IPV®. Wrong vaccines are sometimes administered when catch-up vaccination is planned. For example at 12 months of age a child needing a catch-up dose of Infanrix hexa® is inadvertently administered Hiberix® vaccine at the same time: the child has received two doses of the antigen Haemophilus influenzae type b on the same day. Understanding the antigens in monovalent and combination vaccines can avoid unnecessary injections for an individual.

2. The vaccine was incorrectly prepared prior to administration

The most common error relates to vaccines that require a reconstitution process as part of the preparation. In these instances a vaccine not reconstituted will mean the individual has not received the expected antigen protection and therefore is at risk of infection for the particular disease. Examples include the Haemophilus influenzae type b freeze dried pellet not being reconstituted with the Infanrix hexa® diluent in the syringe which contains the diphtheria, tetanus, pertussis, hepatitis B and poliomyelitis antigens. Another example is the freeze dried pellet of varicella antigen Varilrix® vaccine not being reconstituted with the syringe containing diluent.

3. Vaccine documentation issues led to an error

Vaccine documentation can cause many common errors. Examples include failure to document in the patient medical record, not giving the patient personal documentation of the vaccine/s administered or administering the vaccines before checking the records and repeating doses unnecessarily. Other examples are administering the correct vaccine but not selecting the appropriate vaccine in the medical software program and reporting the wrong vaccine brand to the Australian Childhood Immunisation Register. Inadequate or no vaccine documentation can lead to an individual being administered unnecessary vaccines, a vaccine course such as Gardasil® being given too close together, or live virus vaccines being given less than one month apart.

Vaccine errors can increase a local reaction at the injection site, reduce the patient’s confidence in their healthcare provider and most importantly leave a person unprotected against a vaccine preventable disease.
Catch-up of Year 7 students with hepatitis B vaccine

Important information

• 2013 is the final year of the hepatitis B vaccine program for Year 7 secondary school students or age equivalent 12–13 years.
• In 2013 the hepatitis B vaccine will not be administered in the secondary school immunisation program.
• Eligible students should receive the course of hepatitis B vaccine for free in 2013 from a medical clinic or council immunisation service.
• In 2013, most Year 7 secondary school or age equivalent students will have had the hepatitis B vaccine course when they were an infant.

Unsure if an eligible student needs hepatitis B vaccine?

Check the student’s Child Health Record book.

If a child’s immunisation history is unavailable, phone the Australian Childhood Immunisation Register on 1800 653 809 or contact their local council or GP.

Why will the secondary school-based hepatitis B program no longer be administered in 2013?

Most students entering Year 7 in 2013 will have completed the course of hepatitis B vaccine when they were an infant. Since May 2000 a course of hepatitis B vaccine has been offered to all infants. These children do not need further doses of hepatitis B vaccine in Year 7 of secondary school.

Who is eligible?

Year 7 secondary school students or those aged 12 to 13 years are eligible to receive the hepatitis B vaccine for free in 2013 only. Examples of eligible students who may not have received a course of hepatitis B vaccine include those:

• who started school a year later than other children or repeated a year level of school
• who were born overseas and did not receive a course of hepatitis B vaccine in childhood
• who, according to their childhood immunisation record, did not complete a three-dose schedule of hepatitis B vaccine or a combination vaccine containing hepatitis B, such as Comvax®. Please note previous Hib (Haemophilus influenzae type b) vaccination is not a hepatitis B vaccine.

How long will the hepatitis B vaccine catch-up program be free for Year 7 students?

The hepatitis B vaccine is only free for eligible students in 2013. After 2013 this vaccine will not be funded for students.

What happens if a Year 7 student starts their course of hepatitis B vaccine, but doesn’t complete the second dose in 2013?

The student is still required to have the second dose of hepatitis B vaccine 4–6 months after the first dose was given in order to complete the course. This dose will not be funded after 2013.

Where can students receive the vaccine?

Eligible students can receive the hepatitis B vaccine course for free from a medical clinic or council immunisation service. Some medical clinics may charge a consultation fee.

Should I start the course of hepatitis B vaccine again if a student had an incomplete course a number of years ago?

Do not restart a vaccine course, regardless of the interval since the last dose. It is important to see documented evidence of earlier doses given. It is recommended that a Year 7 student is administered any subsequent doses of hepatitis B that they did not receive in childhood. For example:

| Hepatitis B vaccine doses: | | |
|--------------------------|-----------------|
| previously administered  | due now          |
| 1 paediatric dose        | 2 adult doses (4-6 months apart) |
| 2 paediatric doses (given at least one month apart) | 1 adult dose (at least 2 months since last dose) |

Is a booster dose of hepatitis B vaccine required after the primary course has been completed?

Although vaccine induced antibody levels decline with time and may become undetectable, booster doses are not recommended in immunocompetent individuals after a primary course, as there is good evidence that a completed primary course of hepatitis B vaccination provides long lasting protection. This applies to children and adults including healthcare workers and dentists.

What’s new on the immunisation web site?

Recent information added to the Immunisation Section website includes:

- A link to the Australian Q Fever Register - the Register stores information on the Q fever immune status of individuals and has general information on Q fever, as well as providing password access to registered users.
- A link to the Chain of Protection – an informative website that discusses vaccine preventable disease, herd immunity, how diseases transmit and disease protection in an engaging way with the use of videos for health professionals and the public.
- The accredited yellow fever vaccine centres page, which includes information about becoming an accredited yellow fever vaccine provider and links to the World Health Organization and Australian Government yellow fever information.
- Catch-up immunisation which has resources to support the planning of an immunisation catch-up program for an individual.
- National Immunisation Program schedule – Victoria from July 2012.

To view the recently added information and to find out more, please visit the Immunisation Section website at: http://www.health.vic.gov.au/immunisation/

National Centre for Immunisation Research and Surveillance (NCIRS) – new resources

Recent additions and updates have been added to the National Centre for Immunisation Research and Surveillance (NCIRS) website. NCIRS aims to inform policy and planning for immunisation services in Australia and to support initiatives in the surveillance of vaccine preventable diseases, including disease surveillance, vaccine coverage and immunisation adverse events. The Centre also conducts an extensive program of clinical trials and epidemiologic research funded by diverse sources. NCIRS brings together a group of experts and postgraduate students in public health, paediatrics, internal medicine, infectious diseases, epidemiology and laboratory and behavioural sciences.

The recent additions to the website include the following.

Tables showing the history of vaccination in Australia.

The tables provide a summary of the significant events in vaccination practice in Australia, particularly for vaccines used in population-based immunisation programs: http://ncirs.edu.au/immunisation/history/index.php

Childhood and adult immunisation schedules.

NCIRS has developed a table, National Immunisation Program (NIP) Schedule at a glance for children and adults, which lists the vaccines recommended under the NIP: http://ncirs.edu.au/immunisation/schedules/index.php

Factsheets. Factsheets on various aspects of vaccination have been developed by NCIRS for immunisation providers and interested members of the community: http://ncirs.edu.au/immunisation/fact-sheets/index.php
Are you putting your patients at risk of measles?

The Department of Health has been notified of eleven laboratory confirmed cases of measles in Victoria, since 1 January 2012. Ten of these were returned travellers; nine from South East Asia and one from Africa. For one case, measles was locally acquired while in the waiting room of a health facility at the same time as one of the infectious returned travellers.

Measles cases often result in extensive follow-up of exposed individuals (known as ‘contacts’) in clinics, hospitals and aeroplanes. If identification of a case is delayed, and the case returns to the clinic or attends a hospital emergency department, more people could be exposed. A single presentation to a clinic has resulted in up to 80 individuals exposed to one infectious case. This places an enormous burden on resources.

Individuals born after 1965 without documented vaccination history of two doses of a measles-containing vaccine such as MMR should receive post exposure prophylaxis (PEP). This means MMR vaccination (if no contraindication applies such as pregnancy) within 72 hours or NHIg between 73 and 144 hours from time of first contact with the confirmed case. If it is too late to administer PEP, exposed individuals should be provided with information to alert them of their exposure to a measles case and to see a doctor if they develop symptoms. The letter should also advise them to call ahead so that infection control can be implemented to minimise exposure to other people.

Measles – make no mistake

Clinical features of measles include prodromal fever and one of either a severe cough or conjunctivitis or coryza. These symptoms are present for three to four days prior to onset of a generalised maculopapular rash, typically beginning on the face and spreading to the body. Fever (at least 38 °C if measured) must be present at time of rash onset.

If a patient presents with these symptoms and does not have any documented evidence of measles vaccination, consider measles as a diagnosis. This is especially the case if they have recently returned from overseas.

Suspected cases must be notified to the department as it provides valuable time to assess ‘at-risk’ contacts and administration of PEP (where eligible). If the patient meets the criteria described above, the department can assist by expediting testing to a reference laboratory if required.

Take this opportunity to review your patients’ immunisation Health, Age, Lifestyle and Occupation (HALO) status, especially when travelling. People born since 1966 and aged four years and over should have two doses of MMR vaccine. Information relating to a patient’s immunisation HALO is at http://www.health.vic.gov.au/immunisation/halo.htm

Travel advice is located at http://www.smartraveller.gov.au/
The Immunisation Section website is at http://www.health.vic.gov.au/immunisation/

Photo courtesy of Public Health Image Library, Centers for Disease Control and Prevention
A prolonged cold chain breach may mean a recall of patients

When a cold chain breach occurs and goes undetected and unreported for a period of time, however the affected vaccines continue to be administered, a patient recall for revaccination may be recommended. The Immunisation Section recommended the recall of 811 patients between 2007 and June 2012 relating to the administration of cold chain breach affected vaccines.

Management of any recall has multiple consequences:

- leaving people vulnerable to vaccine-preventable diseases they think they are protected against
- undermining people’s confidence in their provider and the immunisation program
- cost and resources to manage the event and revaccinate patients

Vaccines are delicate biological substances that may become less effective or destroyed if frozen or exposed to heat or light. Vaccines should be stored at between 2 °C and 8 °C from manufacture to administration. A cold chain breach occurs when a temperature excursion causes freezing (≤0 °C) or heating (>8 °C), lasting longer than 15 minutes (excluding excursions up to 12 °C for less than 15 minutes, for example, when restocking the fridge.)


Actions to reduce the risk of a patient recall due to a vaccine cold chain breach include:

- educating staff, including new staff, to check and record the fridge temperature daily and before using vaccines
- ensuring all staff involved in vaccine management from the time it is delivered to the time it is administered, understand the importance of cold chain and how to recognise and report a breach.

Report a breach to the Immunisation Section in a timely manner.

- Do not use or discard the vaccine until advice has been given by the Immunisation Section.
- Regularly maintain and service all equipment used in cold chain management such as the fridge, thermometer and data logger.
- Access support and resources from the Immunisation Section including:
  - National Vaccine Storage Guidelines - Strive for 5
  - ‘Cold chain checklist’ designed as an annual self auditing tool
  - Fridge magnet – What is your fridge temperature?

Resources can be downloaded or ordered from http://www.health.vic.gov.au/immunisation
SAEFVIC

In Victoria adverse events following immunisation (AEFI) should be notified to SAEFVIC – Surveillance of Adverse Events Following Vaccination In the Community.

This specialist service helps immunisation providers and the community manage children and adults who have had an AEFI.

How do I report AEFI in Victoria?

Please report an AEFI at any time (24 hours and 7 days a week) by:

Online report via: www.saefvic.org.au
Telephone: 1300 882 924 or 03 9345 4143 between 9am and 4pm, Monday to Friday.

At all other times please leave contact details on the answering machine and the SAEFVIC nurses will return your call as soon as possible.

Download a report form at www.health.vic.gov.au/immunisation and
Email: saefvic@mcri.edu.au
Fax: 03 9345 4163 (24 hours)
Post: SAEFVIC, Murdoch Children’s Research Institute
c/- Royal Children’s Hospital
Flemington Rd
Parkville VIC 3052

What does SAEFVIC provide?

Rapid clinical support and information to patients and immunisation providers.

- specialised immunisation clinics for children and adults with a history of a significant AEFI
- vaccine safety TeleHealth consultations for clients in regional Victoria
- improved knowledge of AEFI by systematic surveillance and investigation of vaccine safety signals
- improved reporting of AEFIs to the Therapeutic Goods Administration (TGA), as all our reports are forwarded to the national Australian Committee on the Safety of Medicine (ACSOM)

What is an AEFI?

The international definition of an AEFI is ‘an unwanted or unexpected event following the administration of a vaccine(s). AEFI may be caused by a vaccine(s) or may occur by coincidence (i.e. it would have occurred regardless of vaccination)’. AEFIs also include conditions that may occur following the incorrect handling and/or administration of a vaccine(s). We welcome reports even if you are unsure whether the vaccine caused the event.

Should all AEFI be reported?

Currently AEFI are classified as ‘common/minor’ or ‘significant’. Please report all significant (or rare and unexpected) AEFI in both children and adults to SAEFVIC. It is not a requirement to report common/minor AEFI, but if you are uncertain, SAEFVIC staff are happy to discuss any vaccine safety queries. Immunisation providers should refer to the current edition of the Australian Immunisation Handbook for more information regarding significant AEFI.

How can immunisation providers refer a patient to an adult or children’s specialist immunisation clinic?

SAEFVIC offers individualised assessment on the suspected adverse event and provides options regarding future vaccinations. Although some adverse events contraindicate further vaccine doses, in most who require it, revaccination is possible. Revaccination plans are provided to providers and patients. If needed, subsequent vaccines can be administered under medical supervision at one of the hospital-based clinics (as an out-patient, or if required as an in-patient).

A GP referral is required for patients to attend any of the SAEFVIC clinics. The immunisation clinics are located at the Royal Children’s and Monash Children’s Hospitals (for children), and Monash Medical Centre and the Royal Melbourne Hospital (for adults). SAEFVIC can provide immunisation providers with more information regarding these clinics and TeleHealth.
The Vaccine Confidence Project – monitoring public confidence in immunisation programs

The Vaccine Confidence Project at the London School of Hygiene and Tropical Medicine has a new website at www.vaccineconfidence.org

In addition to basic information on the Project’s objectives, partners and research work, you will also find regularly updated, select highlights of daily vaccine news, new research papers and a weekly “Confidence Commentary” by the Project leader Dr Heidi Larson.

The website will be developed and expanded over the coming months to become an essential resource for those interested in vaccine confidence and the way in which public concerns are heard and responded to.

Further reading

HPV vaccination and cervical screening by socioeconomic status, Victoria.

Research demonstrates that HPV immunisation is providing a fairly equitable cervical cancer prevention tool in Victoria. More local monitoring of HPV immunisation coverage data within and between schools at the area level is recommended.


Contact

For further information on the Immunisation Section please contact:

Immunisation Section, Department of Health
50 Lonsdale Street, Melbourne 3000

Phone: 1300 882 008
Fax: 1300 768 088
Email: immunisation@health.vic.gov.au
<table>
<thead>
<tr>
<th>Age / School year</th>
<th>Disease</th>
<th>Vaccine brand</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>Hepatitis B</td>
<td>H-B-Vax II Paediatric</td>
<td>Give within 7 days of birth</td>
</tr>
<tr>
<td>2 months</td>
<td>Diphtheria, tetanus, pertussis, hepatitis B, poliomyelitis, <em>Haemophilus influenzae</em> type b, Pneumococcal, Rotavirus</td>
<td>Infanrix hexa, Prevenar 13, RotaTeq</td>
<td>All vaccines can be given from 6 weeks of age</td>
</tr>
<tr>
<td>4 months</td>
<td>Diphtheria, tetanus, pertussis, hepatitis B, poliomyelitis, <em>Haemophilus influenzae</em> type b, Pneumococcal, Rotavirus</td>
<td>Infanrix hexa, Prevenar 13, RotaTeq</td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>Diphtheria, tetanus, pertussis, hepatitis B, poliomyelitis, <em>Haemophilus influenzae</em> type b, Pneumococcal, Rotavirus</td>
<td>Infanrix hexa, Prevenar 13, RotaTeq</td>
<td>See increased risk category section</td>
</tr>
<tr>
<td>12 months</td>
<td>Measles, mumps, rubella, <em>Haemophilus influenzae</em> type b, Meningococcal C</td>
<td>Priorix, Hiberix, NeisVacC</td>
<td>See increased risk category section</td>
</tr>
<tr>
<td>Children aged 12–35 months</td>
<td>Pneumococcal</td>
<td>Prevenar 13</td>
<td>Supplementary catch-up, a single dose from 1 Oct 2011 – 30 September 2012</td>
</tr>
<tr>
<td>18 months</td>
<td>Chickenpox</td>
<td>Varilrix</td>
<td>Not required if history of varicella infection</td>
</tr>
<tr>
<td>4 years</td>
<td>Diphtheria, tetanus, pertussis, polio, Measles, mumps, rubella</td>
<td>Infanrix IPV, Priorix</td>
<td>See increased risk category section</td>
</tr>
<tr>
<td>Year 7 Secondary school</td>
<td>Hepatitis B</td>
<td>H-B-Vax II</td>
<td>Adult 2 dose course; not required if previous course of hepatitis B vaccine completed</td>
</tr>
<tr>
<td></td>
<td>Chickenpox</td>
<td>Varilrix</td>
<td>Not required if history of varicella infection</td>
</tr>
<tr>
<td></td>
<td>Human papillomavirus</td>
<td>Gardasil</td>
<td>3 dose course (girls only)</td>
</tr>
<tr>
<td>Year 10 Secondary school</td>
<td>Diphtheria, tetanus, pertussis</td>
<td>Boostrix</td>
<td></td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander people</td>
<td>Influenza, Pneumococcal</td>
<td>Influenza, Pneumovax 23</td>
<td>Annually See current edition Australian Immunisation Handbook</td>
</tr>
<tr>
<td>From 15 years</td>
<td>Influenza</td>
<td>Influenza</td>
<td></td>
</tr>
<tr>
<td>From 50 years</td>
<td>Pneumococcal</td>
<td>Pneumovax 23</td>
<td></td>
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<tr>
<td>50–59 years</td>
<td>Diphtheria, tetanus</td>
<td>ADT Booster</td>
<td></td>
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<tr>
<td>From 65 years</td>
<td>Influenza</td>
<td>Influenza</td>
<td>Annually Single dose unless medically at risk</td>
</tr>
<tr>
<td></td>
<td>Pneumococcal</td>
<td>Pneumovax 23</td>
<td></td>
</tr>
</tbody>
</table>
## Increased risk categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Disease</th>
<th>Vaccine brand</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 6 months of age With underlying medical risk factors</td>
<td>Influenza</td>
<td>Influenza</td>
<td>Do not give CSL's Fluvax brand to children &lt; 5 years of age and do not use in children 5 to 9 years of age unless there is no alternative brand available.</td>
</tr>
<tr>
<td>Pregnant women At any stage of pregnancy</td>
<td>Influenza</td>
<td>Influenza</td>
<td></td>
</tr>
<tr>
<td>12 months of age premature babies &lt;32 weeks gestation or &lt;2000g birth weight</td>
<td>Hepatitis B</td>
<td>H-B-Vax II Paediatric</td>
<td></td>
</tr>
<tr>
<td>12 months of age With underlying medical risk factors and/or &lt;28 weeks gestation</td>
<td>Pneumococcal</td>
<td>Prevenar 13</td>
<td></td>
</tr>
<tr>
<td>4–5 years of age With underlying medical risk factors and/or &lt;28 weeks gestation</td>
<td>Pneumococcal</td>
<td>Pneumovax 23</td>
<td></td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander people aged 15–49 years With underlying medical risk factors</td>
<td>Pneumococcal</td>
<td>Pneumovax 23</td>
<td></td>
</tr>
<tr>
<td>Aged less than 65 years With underlying medical risk factors</td>
<td>Pneumococcal</td>
<td>Pneumovax 23</td>
<td></td>
</tr>
</tbody>
</table>

## Victorian immunisation programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Disease</th>
<th>Vaccine brand</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women planning pregnancy or after delivery</td>
<td>Rubella</td>
<td>Priorix</td>
<td>Rubella non-immune women planning pregnancy or shortly after delivery</td>
</tr>
<tr>
<td>Living in a household with a hepatitis B positive person</td>
<td>Hepatitis B</td>
<td>H-B-Vax II Paediatric H-B-Vax II Adult</td>
<td></td>
</tr>
<tr>
<td>Hepatitis C positive people</td>
<td>Hepatitis B</td>
<td>Engerix B</td>
<td>Specialist services</td>
</tr>
<tr>
<td>HIV positive people</td>
<td>Hepatitis B</td>
<td>Engerix B</td>
<td>HIV positive person</td>
</tr>
<tr>
<td>Refugees/asylum seekers/ Aboriginal and Torres Strait Islander people</td>
<td>National Immunisation Program</td>
<td>National Immunisation Program</td>
<td>Eligible for NIP vaccines plus some catch-up. See Criteria for use of government vaccine</td>
</tr>
</tbody>
</table>